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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,815	06/28/2000	Yukio Shima	5576-128	5346

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EXAMINER
EINSMANN, JULIET CAROLINE

ART UNIT	PAPER NUMBER
1634	11

DATE MAILED: 10/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/605,815	SHIMA ET AL.	
	Examiner	Art Unit	
	Juliet C Einsmann	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is written in response applicant's correspondence submitted 7/19/02, paper number 10. Claims 1-6 are pending. Claims 4-6 have been amended. Applicant's amendments and arguments have been thoroughly reviewed but are not persuasive to overcome all of the rejections from the previous office action. Any rejections not reiterated in this action have been withdrawn. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. **This action is final.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (Unexamined Japanese Patent 9-76233, March 1997).

Tanaka teaches a method of grinding a pulp to a powder that comprises grinding by means of a vertical roller mill to produce a powdered pulp whose average particle diameter is 70 micrometers (paragraph 9, page 7 of translation, and throughout document). Tanaka further teaches a process for the production of cellulose ether which uses the pulp produced by this method (paragraph 9 and throughout).

Claim Rejections - 35 USC § 103

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downing *et al.* (US 2663907) in view of Tanaka.

Downing *et al.* teach a method for producing cellulose ethers which comprising grinding pulp to a powder on a roller mill and then converting the powder into cellulose ethers. Downing *et al.* do not teach a method which utilizes a vertical grinding mill.

Tanaka teaches a method for producing cellulose ethers which comprises grinding pulp to a powder on a vertical roller mill (paragraph 9), wherein said method results in the production of powder with a particle size of 70 micrometers.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have used the vertical grinding mill provided by Tanaka in the methods for producing powder from pulp for making cellulose ethers taught by Downing *et al.* The ordinary practitioner would have been motivated to use the vertical grinding mill provided by Tanaka because Tanaka teaches that such a method has a benefit of producing cellulose ethers with "good fluidity, and the average particle diameter is small. Moreover, a bulk density is high and a reduction of the viscosity when making aqueous solution is few. And a vibration and the noise of the pulverization device are few and a work environment is good (paragraph 33)."

Response to Remarks

Applicant's arguments with regard to Tanaka were persuasive with regard to claims 4-6. Tanaka does not teach a method in which the powder formed from the grinding of powder to pulp is used as a starting material for the production of cellulose ether. However, applicant's argument is not persuasive with regard to claims 1-3. Applicant argues that the Tanaka reference

is directed to grinding processes for producing cellulose ether powder. This is true, but claims 1-3 encompass such methods. The term "pulp" refers to the morphology of the material being ground. In the case of Tanaka, they are pulverizing fibrous cellulose ether (paragraph 0017, for example) which is a pulp. Thus, Tanaka provides a method for reducing a pulp to a powder which comprises grinding pulp by means of a vertical roller mill to produce powdered pulp. The pulp, in this case has been previously treated to make it a cellulose ether pulp. Claims 1-3 do not exclude such treatment, thus the 102(b) rejection over Tanaka is maintained with regard to these claims.

With regard to the rejection of claims 4-6 under 103, applicant's arguments are set forth against the references individually. Applicant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Downing is relied upon to teach methods for making cellulose ethers wherein pulp is ground to a powder and then treated. As noted in the rejection, Downing differs from the claimed invention because it does not teach a vertical grinding mill. Tanaka provides methods for using vertical grinding mills in

the production of cellulose ethers and the benefits of using the vertical grinding mill. Thus, as stated in the rejection, it would have been obvious to have used the vertical grinding mill in the methods taught by Downing et al. in order to have taken advantage of the benefits of the vertical grinding mill taught by Tanaka. Thus, the 103 rejection is maintained.

Conclusion

5. No claims are allowed.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliet C. Einsmann whose telephone number is (703) 306-5824. The examiner can normally be reached on Monday through Friday, from 9:00 AM until 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 and (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Juliet C Einsmann
Examiner
Art Unit 1634

October 4, 2002

W. Gary Jones
Supervisory Patent Examiner
Technology Center 1600